



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,824	02/19/2002	Kweon Jung	1607-0260P	6323
2292	7590	01/15/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			BARRY, CHESTER T	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/049,824	JUNG, KWEON
	Examiner Chester T. Barry	Art Unit 1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 20 October 2003.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-6 and 8 is/are pending in the application.
  - 4a) Of the above claim(s)       is/are withdrawn from consideration.
- 5) Claim(s) 1 and 2 is/are allowed.
- 6) Claim(s) 3-6 and 8 is/are rejected.
- 7) Claim(s) 3-5 is/are objected to.
- 8) Claim(s)       are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on       is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No.      .
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)      .
- 4) Interview Summary (PTO-413) Paper No(s)      .
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other:

Claim 3 is objected to for minor informalities: “[B]acteria promotes” is grammatically incorrect. The examiner takes official notice of the fact that “bacterium” and “promotes” are nouns and verbs singular in number, respectively. Furthermore, “bacteria” and “promote” are nouns and verbs plural in number, respectively. Claim 3 as originally presented was *allowed*: That is, there were no objections or rejections. Original claim 3 properly recited “bacteria promote.” As amended, it improperly recites “bacteria promotes.” Claims 4 and 5 are objected to for the same reasons as those given above with respect to claim 3.

Claims 3 – 5, 6, 8 are rejected under Sec.112, second paragraph, for failing to particularly point out and distinctly claim the invention. Claim 3 was *allowed* in its original form. Applicant has amended claim 3 in at least the following respect:

Before amendment:

“said . . . bacteria promote the heavy metal to precipitate in the form of dissoluble metal sulfides, in order to prevent the heavy metal from exuding out of the incineration ash as the eluate”

After amendment:

“said . . . bacteria promotes the heavy metal to precipitate in the form of dissoluble metal sulfides, in-order to prevent whereby the heavy metal is provided from exuding out of the incineration ash as the an eluate”

In this case, the phrase, “heavy metal is **provided from** exuding” cannot be understood. It is unclear what is being claimed. Correction is required. Claims 4 and 5 are similarly rejected insofar as they refer to claim 3.

Notwithstanding the amendment to claim 6 filed in October, 2003, Claim 6 remains rejected under Sec.112, second paragraph, for failing to particularly point out and distinctly claim the invention. Claim 6 recites a method "which comprising the steps:." It is suggested that this expression be changed to "which comprises the steps:," "which comprises the steps of:," or simply "comprising the steps:" or "comprising the steps of:." Claim 6 at line 13 recites "incineration ash as the insoluble metal sulfides," but no antecedent basis for "the . . . sulfides" could be found in the claim. To which sulfides does applicant refer? Claim 8 is rejected for the reasons given as to claim 6.

Is applicant aware that applicant cancelled claim 7? At page 6 of the amendment filed October 20, 2003, applicant instructed us to cancel claim 7 ("7. (CANCELLED)"). But applicant also apparently requests allowance of "claims 1 – 5 and 6 – 8." As applicant stated in the October 20, 2003, paper:

As the Examiner will note, claims 1-5 and 6-8 have been amended to eliminate all of the inadvertencies associated with 35 U.S.C. § 112, second paragraph, and thus, it is believed that the present application, containing condition for allowance. Thus, reconsideration of the claims 1-5 and 6-8 is in rejections, and allowance of all of the pending claims is respectfully requested.

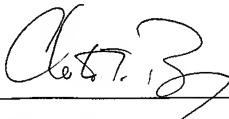
Applicant's suggestion for the examiner to contact Mr. Joseph Kolasch by telephone should there be any outstanding matters that need to be resolved in the present application was carefully considered. In light of the new issues raised by applicant's written response to the June 2003 Office action, the examiner suggests that applicant file a written response to this action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Applicant may find it helpful to be reminded that amendments filed after final action under 37 CFR 1.116 are not entitled to entry as a matter of right. Timely amendments filed with a Request for Continued Examination are ordinarily entered as a matter of right. Amendments which add new matter prohibited by 35 USC Sec.132 are ordinarily not entered.

USP 5645730 is cited of background interest

  
571-272-1152

CHESTERT. BARRY  
PRIMARY EXAMINER